

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Kindly Cancel Claims 1-20; 22, 23, 29-31.

STATUS OF THE CLAIMS:

1-20 (cancelled herein)

20. A method of identifying a compound that modulates the expression of a gene encoding GLUTX, the method comprising the steps of:

- a) contacting a cell expressing a gene with a test compound; and
- b) detecting the level of expression of the gene in the presence of the test compound, wherein a difference in expression in the presence of the test compound compared to expression in the absence of the test compound indicates that the test compound modulates expression of the gene.

21. The method of claim 20, wherein the compound is selected from the group consisting of polypeptides, ribonucleic acids, small molecules, ribozymes, antisense oligonucleotide, and deoxyribonucleic acids.

22. (cancelled herein)

23. (cancelled herein)

24. A method for modulating hexose uptake, the method comprising modulating the expression or activity of a gene encoding the amino acid sequence of SEQ ID NO:2.

25. A method for treating a patient having a disorder associated with aberrant expression or activity of a gene encoding the amino acid sequence of SEQ ID NO:2, the method comprising administering a therapeutically effective amount of a compound that decreases the expression or activity of the gene.

26. The method of claim 25, wherein the compound is selected from the group consisting of polypeptides, ribonucleic acids, small molecules, ribozymes, antisense oligonucleotides, and deoxyribonucleic acids.

27. A method for treating a patient having a disorder associated with aberrant expression or activity of a GLUTX polypeptide comprising the amino acid sequence of SEQ ID NO:2, the method comprising administering a therapeutically effective amount of a compound that increases the expression or activity of the gene.

28. The method of claim 27, wherein the compound is selected from the group consisting of polypeptides, ribonucleic acids, small molecules, ribozymes, antisense oligonucleotides, and deoxyribonucleic acids.

29-31. (cancelled herein)

32. The method of claim 20, wherein the gene further comprises a sequence encoding an amino acid sequence selected from the group consisting of:

- i) the amino acid sequence of SEQ ID NO:2, and
- ii) at least 15 contiguous amino acids of SEQ ID NO:2.